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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/721,519	11/21/2000	Terje A. Skotheim	MT-0026.1	2623

7590

10/28/2002

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EXAMINER

TSANG FOSTER, SUSY N

ART UNIT	PAPER NUMBER
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1745

DATE MAILED: 10/28/2002

9

Please find below and/or attached an Office communication concerning this application or proceeding.

1.0

Office Action Summary

Application No.

09/721,519

Applicant(s)

SKOTHEIM ET AL.

Examiner

Susy N Tsang-Foster

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-83 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-83 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-16 and 37-62, drawn to an electrochemical cell comprising a lithium anode, classified in class 429, subclass 231.95.
 - II. Claims 17-36 and 63-83, drawn to a method of making an electrochemical cell, classified in class 29, subclass 623.1.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions of Group II and Group I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product can be made by a materially different method such as first depositing a protective metal layer onto a substrate and then plating lithium through the protective metal layer to form an anode.
3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

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4. This application contains claims directed to the following patentably distinct species of the claimed invention:

If Group I is elected, the followings species to be elected from each category below are:

First category for Group I- one species to be elected for the second layer of temporary protective coating to be selected from: copper, magnesium, aluminum, silver, gold, lead, cadmium, bismuth, indium, germanium, gallium, zinc, tin, and platinum.

Second category for Group I-one species to be elected for the anode substrate to be selected from: metal foils, polymer films, metallized polymer films, electrically conductive polymer films, polymer films having an electrically conductive coating, electrically conductive polymer films having an electrically conductive metal coating, and polymer films having conductive particles dispersed therein.

Third category for Group I-one species to be elected for the third layer to be selected from: lithium silicates, lithium borates, lithium aluminates, lithium phosphates, lithium phosphorus oxynitrides, lithium silicosulfides, lithium germanosulfides, lithium lanthanum oxides, lithium tantalum oxides, lithium niobium oxides, lithium titanium oxides, lithium borosulfides, lithium aluminosulfides, lithium phosphosulfides, electrically conductive polymers, ionically conductive polymers, sulfonated polymers, hydrocarbon polymers, and a crosslinked polymer.

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Fourth category for Group I- one species to be elected for the fourth layer to be selected from:

electrically conductive polymers, ionically conductive polymers, sulfonated polymers, hydrocarbon polymers, and a crosslinked polymer.

If Group II is elected, the following categories of species to be elected are:

First category for Group II- one species to be elected for the second layer of temporary protective coating to be selected from: copper, magnesium, aluminum, silver, gold, lead, cadmium, bismuth, indium, germanium, gallium, zinc, tin, and platinum.

Second category for Group II- one species to be elected for the anode substrate to be selected from: metal foils, polymer films, metallized polymer films, electrically conductive polymer films, polymer films having an electrically conductive coating, electrically conductive polymer films having an electrically conductive metal coating, and polymer films having conductive particles dispersed therein.

Third category for Group II- one species to be elected for the third layer to be selected from: lithium silicates, lithium borates, lithium aluminates, lithium phosphates, lithium phosphorus oxynitrides, lithium silicosulfides, lithium germanosulfides, lithium lanathanum oxides, lithium tantalum oxides, lithium niobium oxides, lithium titanium oxides, lithium borosulfides, lithium aluminosulfides, lithium phosphosulfides, electrically conductive polymers,

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ionically conductive polymers, sulfonated polymers, hydrocarbon polymers, and a crosslinked polymer.

Fourth category for Group II- one species to be elected for the fourth layer to be selected from:

electrically conductive polymers, ionically conductive polymers, sulfonated polymers, hydrocarbon polymers, and a crosslinked polymer.

Fifth category for Group II: one species to be elected for the technique of depositing the first layer of the anode: thermal evaporation, sputtering, jet vapor deposition, laser ablation, extrusion.

Sixth category for Group II: one species to be elected for the technique of depositing the second layer of the anode: thermal evaporation, sputtering, jet vapor deposition, and laser ablation.

Seventh category for Group II: one species to be elected for the technique of depositing the third layer of the anode: sputtering, thermal evaporation, laser ablation, chemical vapor deposition, jet vapor deposition, flash evaporation, electron beam evaporation, vacuum thermal evaporation, plasma enhanced (assisted) chemical vacuum deposition, and laser enhanced chemical vapor deposition.

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Eighth category for Group II: one species to be elected for the technique of depositing the fourth layer of the anode: thermal evaporation, sputtering, laser ablation, chemical vapor deposition, jet vapor deposition, flash evaporation, electron beam evaporation, vacuum thermal evaporation, plasma assisted chemical vacuum deposition, and laser enhanced chemical vapor deposition.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species from each of the categories in the group elected for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 1, 17, 37, and 63 are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the

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examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

5. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

7. In applicants' election on 8/6/2002 of the species "moralized polymer films" is not understood by the Examiner since this species is not in the claims. The Examiner is rewriting the restriction requirement in response to applicants' comments filed on 8/6/2002.

8. Any inquiry concerning this communication or earlier communications should be directed to examiner Susy Tsang-Foster, Ph.D. whose telephone number is (703) 305-0588. The examiner can normally be reached on Monday through Friday from 9:30 AM to 6:00 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached at (703) 308-2383. The phone number for the organization where this application or proceeding is assigned is (703) 305-5900.

The fax phone numbers for the organization where this application or proceeding is assigned is (703) 872-9310 for regular communications and (703) 872-9311 for After-Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

st/24 October 2002

Andy Isang - Foster